

Point-and-Click Patient Information System For Sabah Hospital, Kuwait

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Background. From a consulting physician's viewpoint, the patient's medical record is at the core of the relationship between the patient and the medical care team. The medical record is critical for proper patient management, a valuable tool for medical education and clinical and epidemiological research, a vital source of information for quality assurance, and an essential protection for defence in litigation. For the staff physician, writing up patient files is time consuming and boring - often leading to observations of "doing well" rather than concrete data. Traditional documentation practices lack uniformity making it difficult for others to find critical patient data quickly. There are often redundancies, inconsistencies, illegibility and non-standard abbreviations in today's medical records. For patients who accumulate a large file, follow up becomes a personal memory process because the medical record is just too unwieldy to use.

It has been observed that generally the more organised the medical record, the better the patient care. The medical record is a tool much like a stethoscope or scalpel: used properly it is most useful, misuse it and the result is, at best, useless and at worst, dangerous and a liability. Just as the medical profession adopts new technologies to improve patient care, the profession must also adopt new technologies to manage information.

System: Taking advantage of the enormous technological advances in computers we developed a Point-and-Click (PAC) Patient Information System for the use by direct care providers. The PAC is a comprehensive computerized patient record system with the essential clinical aspects of a traditional medical record. It comprises of patient demographic data, problem lists, visit dates, vital signs, allergies, procedures or surgeries,

past medical, social and family history. It also includes laboratory tests and prescription ordering functions. The system can graphically display the vital sign readings and laboratory results, and includes reports of radiology, consultations, discharge summaries, and other ancillary test reports.

The purpose of developing the PAC patient information system is to maintain vital information on patients and make that information immediately available to all health professionals. Underlying this was a philosophy of flexibility and efficiency. The patient information system was built on these essentials:

- be easy-to-use (point-and-click)
- focus on the patient (ensure collection of clinical information, not just administrative data)
- designed by physicians (unstructured text converted to structured entry)
- provides bilingual support (Arabic/English names)
- meet needs of the hospital in transition to computer use (produce automated forms)

Evaluation. This exercise is the culmination of two years of design and development by the Al-Sabah physician team and software developers at the Health Information Administration Department at Kuwait University. It has been used at Al-Sabah Hospital, Kuwait on a test basis for past few months. The system has been found to be easy to learn and use, and easy to configure.. Printed orders from the system have been well received by the care-givers.

Conclusions. The system is not yet comprehensive, but provides a proof of concept (scalability, and potential integration with planned future electronic source systems).